

SUBJECT: A Level Physics

YEAR: 12 and 13

HEAD OF DEPARTMENT: Mr Griffiths

GROUPING POLICY: Years 12 and 13 are taught separately

EXAM BOARD: OCR

SPECIFICATION LINK:

<https://www.ocr.org.uk/qualifications/as-and-a-level/physics-a-h156-h556-from-2015/>

CURRICULUM INTENT

Students study OCR Physics A. Although we intend that all students starting the course will sit the full A level in Physics at the end of Year 13, it is sometimes necessary for students to take the AS level at the end of Year 12. Good reasons for this may be: students are studying Physics as their fourth A level for extra breadth and need to drop down to three A levels to keep their workload manageable in Year 13; students are really struggling, may not complete the full A level and would benefit from sitting an AS level and gaining a qualification; a student needs to swap to a different option in Year 13 in order to progress to the next steps. If this is the case then we make sure that students sitting the exam have covered all of the content required and have practised AS level papers. This may be through giving them some extra small group lessons outside curriculum time.

We teach the OCR A specification for a number of reasons:

- The organisation of the course provides a good progression onwards from students' GCSE studies.
- There is flexibility about how students develop their practical skills: there are three practical activities given per Practical Assessment Group (PAG), giving students lots of opportunities to develop and demonstrate their skills. We also have the latitude to devise practical activities of our own if required.
- We have found the support provided by OCR through practical monitoring visits helpful, and this has enabled us to develop our provision in this area.
- We find that our students are able to understand what the exam questions mean and are able to interpret them and show what they can do.
- The course provides a broad grounding which enables students to go on to a wide range of further study or work.
- We are using the same exam board for all three Science A levels, which gives some consistency to teaching staff and students who need to work across multiple Science courses.

COURSE CONTENT:

Chemistry A Level content is split into six teaching modules: Modules 1 to 4 constitute the stand-alone AS Level qualification; Modules 1 to 6, combined with the practical endorsement, constitute the full A Level. The modules can be summarised as:

- **Module 1** Development of practical skills.

- **Module 2** Foundations of physics.
- **Module 3** Forces and motion.
- **Module 4** Electrons, waves and photons.
- **Module 5** Newtonian world and astrophysics.
- **Module 6** Particles and medical physics.

What will homework look like?

Homework will be most frequently related to the assessment of the current unit of study. This may take the form of set learning tasks or questions from the provided text book, or questions from previous examination papers. It may take the form of a research task that helps to support the introduction of a new unit of study. Students will be encouraged to explore and evaluate different methods for revision to identify their preferred learning style.

In addition, students are expected to spend time going through their notes and adding to them.

ASSESSMENT

Students will sit written examinations. The majority of students will sit examinations in Year 13 only. Students intending to drop the subject of who we feel would benefit, will sit the AS examinations in Year 12.

Examinations - AS Level:

There will be 2 exams:

- Papers 1 and 2 can assess any content from Modules 1 to 4.

Examinations - A Level:

There will be 3 exams:

- Paper 1 assesses content from Modules 1, 2, 3 and 5.
- Paper 2 assesses content from Modules 1, 2, 4 and 6 plus any material appropriately flagged within the specification from Modules 3 and 5.
- Paper 3 assesses content from Modules 1 to 6.

Internal Assessment:

Students will be assessed at least once per term on the material they have studied recently. There will also be mock examinations throughout the course. Students are expected to re-sit these tests if their performance is substantially under target.

Practical activities will be undertaken and used as evidence for the awarding of the practical endorsement. The practical endorsement does not contribute to the overall grade but must be completed in order to achieve the A Level qualification.

ADDITIONAL INFORMATION

How can I support my child in this subject?

Encourage your child to be organised with class notes, extra study notes and revision notes. Often they will have vast amounts of notes from all their subjects, which can quickly become disorganised and hard to find particular topics if not organised from the start. Students also need to be organised with homework, completing it as soon as they receive it, so that they have time to research and seek help if needed.

Encourage your child to be independent in their learning by looking things up, reading around the subject, helping each other, seeking the most appropriate help when other avenues are exhausted. Students are expected to be much more independent in the sixth form.

Ensure that your child has access to online course materials, e.g. text books and associated reference materials. Hard copies of the text books are located in the Science Department or can be purchased through the school at the start of the year.

Help them realise that there is never a time when they have no work to do! There is always reading, adding to notes, making revision resources and completing past papers.

Help them organise their time by revising early for the main exams, completing as many practice papers as possible. Every test they do is important and needs thorough preparation.

How can I support my child with exams?

On the OCR web-site, in the A Level Physics A resource area there are specimen papers and answers, exemplar answers to controlled assessment questions, guidance of the quality of written communications and schemes of work that detail all the topics students need to understand.

In addition, extensive resources and question banks are available through the school website and all students have access to a 'kerboodle' online test book.